Practical Suicide-Risk Management for the Busy Primary Care Physician

Anna K. McDowell, MD; Timothy W. Lineberry, MD; and J. Michael Bostwick, MD

On completion of this article, you should be able to (1) express rates of having serious thoughts of suicide and making plans for suicide in the US population, (2) give examples of areas requiring clinical practice improvement associated with depression and suicide assessment in primary care, and (3) recognize the importance of assessment and treatment of anxiety and agitation in suicidal states.

Suicide is a public health problem and a leading cause of death. The number of people thinking seriously about suicide, making plans, and attempting suicide is surprisingly high. In total, primary care clinicians write more prescriptions for antidepressants than mental health clinicians and see patients more often in the month before their death by suicide. Treatment of depression by primary care physicians is improving, but opportunities remain in addressing suicide-related treatment variables. Collaborative care models for treating depression have the potential both to improve depression outcomes and decrease suicide risk. Alcohol use disorders and anxiety symptoms are important comorbid conditions to identify and treat. Management of suicide risk includes understanding the difference between risk factors and warning signs, developing a suicide risk assessment, and practically managing suicidal crises.

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AUDIT = Alcohol Use Disorders Identification Test; BBW = black box warning; FDA = US Food and Drug Administration; SAFE-T = Suicide Assessment Five-step Evaluation and Triage

Suicide is the eleventh leading cause of death[1] in the United States, accounting for more than 1% of all US deaths annually.[2] In 2007, there were 34,598 deaths by suicide, more than half involving firearms.[1] Recently, concerns have been raised, via anecdotal reports, that the US suicide rate may be rising.[3-5] These worries are based on population-level effects of the persistent increased unemployment rate due to the severe recession.[3-5]

Serious thoughts of suicide, plans for suicide, and suicide attempts are surprisingly common in the general population (Table 1).[6] Despite that frequency, death by suicide is still a low base-rate occurrence and impossible to predict accurately.[7,8] Although a relatively uncommon event, suicide has a lifelong and profound effect personally on the families, friends, and physicians of the person committing suicide.

In this concise review, we provide a pragmatic and clinically relevant background on suicide risk management for nonpsychiatrists. We will use frequently asked questions based on our clinical experiences and review key principles of depression treatment as they relate to suicide risk management. We will update and synthesize information gained from research into concerns associated with the antidepressant black box warnings (BBWs) for suicidality and highlight their 2009 revisions.[9] We will then close by describing basic principles in identifying those at risk of suicide, assessing them, and devising practical patient management strategies.

IMPORTANCE TO PRIMARY CARE

Two practice realities have spurred interventions to improve primary care recognition and treatment of depression as a public health suicide prevention strategy.[10,11] First, patients dying by suicide visit primary care physicians more than twice as often as mental health clinicians.[10] A review of studies analyzing this clinical scenario estimated 45% of those dying by suicide saw their primary care physician in the month before their death.[10] Only 20% saw a mental health professional[10] in the preceding month. Women and older patients are more likely to have sought care in the month before suicide[10] than men and younger patients. Second, generalists (internists, pediatricians, family physicians) write most antidepressant prescriptions (62%) in the United States.[11] When these 2 facts are considered together, it becomes clear that primary care clinicians provide most antidepressant treatment and are the group most likely to see patients at risk of suicide in the month before their death.

These findings have generated multiple suicide prevention efforts in primary care.[12-15] Some research shows that educating primary care clinicians can help protect against suicide, primarily by improving the recognition of depression and leading to the increased prescribing of antidepressants.[12-15] These effects are stronger when collaborative care models of depression treatment are used.[16,17]

PATIENT GROUPS AT RISK

Years of research on suicide show those with current psychiatric illness are the most common group dying by sui-

From the Department of Psychiatry and Behavioral Sciences (A.K.M.), University of Washington, Seattle, WA, and Department of Psychiatry and Psychology (T.W.L., J.M.B.), Mayo Clinic, Rochester, MN.

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Individual reprints of this article are not available. Address correspondence to Timothy W. Lineberry, MD, Department of Psychiatry and Psychology, Mayo Clinic, 200 First St SW, Rochester, MN 55905 (lineberry.timothy@mayo.edu).

TABLE 1. **Prevalence of Suicidal Thoughts and Behavior in US Adults**

	Percentage	No.
Serious thoughts	3.7	8.3 Million
Made plan	1.0	2.3 Million
Suicide attempt	0.5	1.1 Million
Suicide deaths[a]	0.01	34,598

[a] Data for suicide deaths are for 2007 and are from the Centers for Disease Control and Prevention.[1]
Adapted from the 2008 National Survey on Drug Use and Health Report: Suicidal Thoughts and Behaviors among Adults.[6]

cide.[18-21] Psychological autopsies, incorporating information from medical records and interviews with families and friends of those dying by suicide, find that more than 90% have a psychiatric disorder.[18,19] Specific disorders associated with suicide include mood (ie, bipolar disorder and major depression),[22] substance use,[23] anxiety, impulse control, personality disorders,[20,21] and psychotic disorders.[24] Anxiety, depressive disorders, and alcohol use disorders are the most common psychiatric illnesses seen in general practice.[25] Patients with more than one psychiatric illness are at higher risk, particularly those with both depressive disorders and substance use disorders.[6,26] We will focus on management of depressive disorders, the need for recognition of substance use disorders, and the interplay among mood, substance use, and anxiety disorders.

PRIMARY CARE DEPRESSION TREATMENT AND SUICIDE

Research shows that identification of depression—a critical first step in its management—has improved.[27] Clinical management of 3 other vital suicide risk factors in depressed patients continues to be poor.

First, comorbid alcohol problems frequently remain unidentified and thus untreated. In a study evaluating a patient cohort for receipt of recommended care for 25 acute and chronic conditions, only 11.0% of patients with alcohol use disorders received recommended care vs 82.7% of those with senile cataracts.[28] Alcohol use disorders had, by far, the lowest appropriate treatment rates of any disorders studied.[28] Separate research, conducted in depressed patients in general care settings, found that only 24% of patients were assessed for alcohol use.[27]

Second, treatment is often too short or otherwise inadequate. A 2007 study[27] found 46% of depressed patients received 2 or more months of treatment, when the recommended length of treatment is at least 4 to 9 months after remission of symptoms.[29] Also, most patients unresponsive to initial treatment did not have their medication adjusted.

Third, suicidal thoughts and suicidal behavior are poorly managed. The same study revealed suicidal ideation was assessed in only 24% of patients.[27] When it was identified, generalist physicians typically neither treated it themselves nor referred patients for mental health consultation. In patients with current suicidal ideation and/or documentation in the medical record of having made a suicide plan or attempt, only one third were referred for consultation.

DON'T ASK, DON'T TELL, DON'T KNOW

Further reinforcing these findings, a 2007 study[30] found only 36% of simulated patients requesting antidepressant medication were even asked about suicide. Patients with simulated major depressive disorder were slightly more likely to be asked,[30] although more than half of these patients were not asked. Physician-specific factors that were related to training (eg, time since training) or that could have had a bearing on individual beliefs (eg, sex) did not explain the results.[30] Notably, physicians who had personally experienced depression, those who had family or friends with depression, and those who worked in academic settings were more likely to ask about suicide.[30]

Although this study found no association with level of physician training, residency training for depression and suicide-related behavior is perceived as inadequate.[31] Residency training directors surveyed in family medicine, pediatrics, and internal medicine reported substantial dissatisfaction in the adequacy of their program's depression and suicide training.[31] More family medicine directors reported general satisfaction with the training quality, whereas most pediatrics and internal medicine residency training directors were significantly less likely to be satisfied.[31]

SUICIDE INQUIRY

Every patient being evaluated for possible depression or with a history of depression should be asked about suicidal thoughts and behaviors. We recommend using a step-wise approach (Figure 1) that starts with a general question and becomes more specific with each successive question.[32] Clinicians should start by asking whether the patient feels hopeless or has thoughts of death. They should then ask whether the patient has explicit thoughts of suicide, a specific plan and means for carrying it out, and the intention to carry it out. In addition to assessing the patient's current suicidal thoughts and behaviors, clinicians should gather further information about the patient's family history of suicide and previous suicide attempts.

In assessing suicide risk in patients requiring hospitalization, the yield may be low, but the stakes are high. In a 2009 study[33] that screened nearly 1000 patients in a cardiology clinic for depression and suicidality, 109 patients (12%) expressed suicidal ideation. These patients were immediately assessed

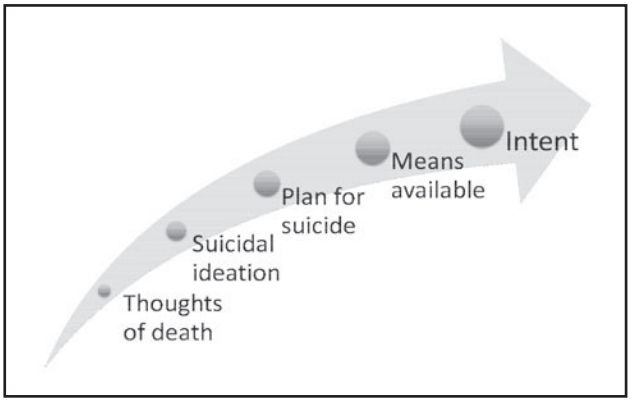

FIGURE 1. Hierarchy of suicide assessment.

by mental health professionals, and suicide risk was high enough in 4 patients to require emergent hospitalization.[33]

RISK FACTORS VS WARNING SIGNS

To better understand and prevent suicide, research has focused on identifying risk factors from clinical samples of convenience and cross-sectional general population studies. Many factors increasing risk of death by suicide are known.[34] Unfortunately, most of these factors are immutable, as for example being white, male, or divorced, having made a previous suicide attempt, or having a family history of suicide.[34] These factors are nonspecific, highly prevalent, unchanging over time, and not modifiable. As a result, many people may have an elevated risk profile, but only a very few will die by suicide. Predictive prospective models do not exist for the general population,[7,8] psychiatric outpatients, or psychiatric inpatients as to which individuals will eventually attempt or commit suicide. The intensity of care required (ie, outpatient vs psychiatric inpatient) differentiates lifetime vs immediate risk.[22,35]

Distinguishing between warning signs and risk factors is helpful clinically (Table 2).[36] Warning signs are specific symptoms or behaviors that are acute or subacute in nature. They can be identified, explored further, and addressed with clinical and psychosocial interventions. Anxiety, psychomotor agitation, sleep problems, poor concentration, hopelessness, social isolation, and excessive or increasing use of alcohol or drugs are all worrisome factors that can be modified with prompt interventions.

Although highly treatable with pharmacological interventions, including benzodiazepines and antipsychotic medications, severe psychic anxiety is particularly worrisome because of its prominent association with suicide in the hospital or immediately after discharge.[37] Also concerning is the poor impulse control sometimes seen with exacerbations of such psychiatric illnesses as bipolar disorder or borderline personality disorder. Such poor impulse control may respond to more assertive treatment of the underlying disorder. Recent population-level research[20,21] points to anxiety and impulse control disorders as an integral part of progression to suicidal behavior associated with depression.

PREDICTION VS INTERVENTION

Most clinical risk factors for suicide (eg, depression, substance use disorders) are conditions that merit treatment in any case, irrespective of their role in elevating suicide risk. Conversely, we cannot identify those persons already receiving life-saving interventions. The US Preventive Health Services Task Force recommends screening for alcohol misuse in adults, providing brief counseling, and referring for specialized treatment if needed.[38] Screening and treatment of depression are also recommended but only if staff-assisted depression care supports are in place.[39,40]

EDUCATION VS PRACTICE MODEL CHANGE

As noted earlier, initial research[12-15,41] raised hopes that improving identification and treatment of depression could

TABLE 2. **Warning Signs vs Risk Factors for Suicide**

	Warning signs	Risk factors
Relationship to suicide	Proximal	Distal
Evidence basis	Clinically derived	Empirical research
Applicable group	Individuals	Populations
Clinical implications	Intervene to resolve	Limited ability to address
Time basis	Transient	Often static
Examples	Threats to harm self	White
	Planning for suicide	Male
	Talking or writing about suicide	History of a suicide attempt
	Hopelessness	Family history of suicide
	Rage, anger, seeking revenge	Psychiatric diagnosis
	Impulsive or reckless actions	Smoker
	Feeling trapped	Firearms access
	Increasing alcohol or drug use	Physicians
	Withdrawing from others	Prisoners
	Anxiety or agitation	History of sexual abuse
	Increased or decreased sleep	History of psychiatric admission
	Dramatic mood changes	Increasing age
	No purpose or reason for living	Divorced

Adapted from *Suicide and Life Threat Behav,*[36] with permission.
Data from *J Clin Psychiatry*.[37]

prevent suicides. This prevention effort focused on intensive education of primary care physicians. Importantly, when the intensive intervention stopped, suicide rates returned to previous levels. From the authors' experience in multiple care settings, one-time educational interventions are destined to be unsuccessful. Pragmatically, all primary care practices screen for and manage a multitude of different disorders and problems. To be successful, additional screening must become part of the practice's routine clinical flow and involve more than identification and treatment initiation. Treatment of depression must be effective, and follow-up mechanisms aimed at ongoing remission and monitoring of symptoms must be in place.[39] Collaborative care models for treatment of depression are particularly suited for this. They show promise in not only decreasing suicidal behavior[16] but also increasing overall levels of combined treatment with pharmacotherapy and psychotherapy plus faster time to remission vs treatment as usual.[16,42]

For example, the Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) was more effective than treatment as usual in reducing suicide risk in patients aged 60 years or older.[16] This finding was present in urban, suburban, and rural practice sites. Collaborative care patients were more likely to receive treatment and had higher rates of remission of major depression at 4 (26.6% vs 15.2%), 8 (36.0% vs 22.5%), and 24 months (45.4% vs 31.5%). Suicidal ideation in the collaborative care group was 2.2 times less likely after 24 months than in the treatment-as-usual group. The adoption and widespread use of collaborative care models for depression could result in reduced suicide rates nationally.

Collaborative care involves multiple tools and strategies for managing depression in a primary care practice population.[43] These interventions include education and decision support for primary care clinicians, along with use of depression care managers, often specially trained primary care nurses. Care managers continuously monitor patient outcomes, provide patient education, encourage and monitor treatment adherence, and facilitate communication among patients, their primary care physicians, and mental health clinicians. Meta-analyses have shown collaborative care for depression to be both more effective and, at larger population levels, more cost-effective than treatment as usual.[17,44]

MANAGEMENT WITHOUT COLLABORATIVE CARE

The 2009 US Preventive Health Services Task Force recommendations[39] no longer advise general screening for depression unless collaborative or supportive care staff models (eg, nurse care managers) or other systematic depression treatment approaches are in place. Data from screening alone have not been shown to change outcomes.[40] However, the US Preventive Health Services Task Force notes that there may be considerations for screening in individual patients.[39] Our recommendation for a primary care group practice without a collaborative care model is to strongly consider the feasibility of developing one within the practice. The evidence base for collaborative care's efficacy in reducing costs and improving outcomes in depression is strong and growing stronger.[17,45]

If practice size, staffing, or reimbursement issues prevent implementing a collaborative care approach, we advise standardizing treatment. Clinicians should focus on assessing longitudinal outcomes in depressed patients and improving screening of, and interventions for, patients with alcohol use disorders. Time-effective assessment is available for both depression and alcohol use disorders. Unfortunately, many practices have no strategies for objectively assessing and following up a patient's response to treatment or lack thereof.

A number of self-administered tools for identifying depression are effective and rapidly administered.[46] It is beyond the scope of this article to review all the surveys available for assessing depression severity. The Patient Health Questionnaire-9, a self-report survey with 9 questions that is based on the *Diagnostic and Statistical Manual of Mental Disorders*, *Fourth Edition*, criteria for depression and that specifically asks about suicide, is commonly used for both baseline screening and monitoring of outcomes over time in primary care. A burgeoning number of studies support its use for screening in primary care settings.[47]

Likewise, a number of tests for screening alcohol use disorders are available.[48] Although the 4 CAGE questions (cut down, annoyed, guilty, eye-openers) are widely used in training programs and practice settings to identify alcohol dependence, the instrument is limited by its failure to screen for hazardous drinking. We recommend the Alcohol Use Disorders Identification Test (AUDIT) in either its full 10-question form or a briefer 3-question version (AUDIT-C) that consists of the 3 consumption questions from the AUDIT. Developed by the World Health Organization, the AUDIT and AUDIT-C are also free and have a strong research base. They are between 50% and 90% sensitive in picking up alcohol misuse, abuse, or dependence and approximately 80% specific in ruling it out.[49]

We will not review the laboratory state markers for alcohol dependence or physical signs and associated symptoms with alcohol-related problems.[50] However, consideration of collateral history, physical signs, and state markers is critical. If patients meet screening criteria for hazardous drinking, brief counseling should be provided,[38] and patients who use alcohol excessively or are dependent

on alcohol should be referred for specialized assessment and treatment.

ANTIDEPRESSANT EFFICACY

Popular media reports have highlighted recent studies implying that antidepressants are ineffective for the treatment of depression.[51,52] Unfortunately, these superficial reports do not address the complex issues raised by these research findings for clinical practice.[53] Data from multiple investigations comparing antidepressants and placebo show that antidepressants work best for patients with moderate to severe, acute depressive episodes.[29] For patients with long-term depressive symptoms, antidepressants are also effective.[29] For a much more detailed review of antidepressant use in primary care, see the June 2010 issue of *Mayo Clinic Proceedings*.[54]

ANTIDEPRESSANT BBW

The 2004 US Food and Drug Administration (FDA) BBW for "suicidality" in patients taking antidepressants confused the public, prescribers, and patients.[55] The BBW was based on reported increases in drug-related suicidal ideation or behaviors, defined as "suicidality," compared with placebo. These increased suicidality reports came from analyzing short-term antidepressant clinical trials. After the initial 2004 BBW release, depression diagnosis and antidepressant prescriptions were reduced across all age groups.[56-58] Further research has clarified some of the questions raised by the BBW.

In a move that was less publicized than the initial BBW, the FDA modified the BBW in 2009 on the basis of further analyses.[9] *The warning applies only to those up to the age of 24 years.* Importantly, FDA analyses indicated a decrease in suicidality in patients aged 65 years or older who take antidepressants (Table 3).

The BBW revision advises that "Patients of all ages who are started on antidepressant therapy should be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior. Families and caregivers should be advised of the need for close observation and communication with the prescriber."[9]

MAKING SENSE OF THE BBW

Two recent studies[59,60] help synthesize practice and research observations and provide helpful guidance for antidepressant prescribing. The first, from Finland,[59] looked at national rates of patients filling, and subsequently refilling, their antidepressant prescriptions vs those filling only their initial prescription and not continuing treatment. The group continuing with treatment showed a significant decrease in all-cause mortality, including suicide.

TABLE 3. **Revised Insert Guidance for Black Box Warning**

Age range (y)	Drug-placebo difference in number of cases of suicidality per 1000 patients treated
Drug-related increases	
<18	14 additional cases
18-24	5 additional cases
Drug-related decreases	
25-64	1 fewer case
≥65	6 fewer cases

From reference 9.

The second study,[60] a nested longitudinal case-control study, followed a large cohort (10,456 cases with 41,815 controls) using a dataset of patients receiving managed care between 1999 and 2006. This study, which controlled for multiple confounding variables, including depression severity, comorbid conditions, and other medications, found antidepressant use to be associated with a decreased risk of attempting suicide.[60] A key finding, however, was that those receiving antidepressant treatment were at higher risk of attempting suicide in the periods after initiation of treatment, after discontinuation of treatment, and after changes in antidepressant dosing. This evidence[59,60] has important implications for clinical practice, suggesting that patients should be monitored closely at the beginning of treatment, should receive an adequate antidepressant trial, and should be encouraged to contact their physician before stopping their antidepressant or making dose changes.

SUICIDE-RISK MANAGEMENT

Initial clinical management after identification of depression and/or an alcohol use disorder should emphasize 3 areas specific to suicide-risk: (1) the importance of recognizing comorbid anxiety or agitation and its treatment, (2) the performance of a suicide risk assessment, and (3) the implementation of some practical office management tips.

TREATMENT OF ANXIETY AND AGITATION

On the basis of clinical experience and research, acute anxiety and agitation are critical suicide warning signs.[61] Of patients hospitalized in psychiatric or other hospitals who died by suicide, only 20% endorsed suicidal ideation before their suicide, but 80% either endorsed or manifested severe anxiety or agitation.[37]

After controlling for other psychiatric comorbid conditions, an international epidemiological study[20] found that anxiety disorders (posttraumatic stress disorder, panic disorder, social anxiety disorder, generalized anxiety disorder) influenced suicidal behavior more than other disorders. All psychiatric disorders predicted a higher risk of onset of sui-

cidal ideation, but anxiety and impulse control disorders affected transitions to suicidal behavior.

After controlling for other variables and effects, US National Comorbidity Survey Replication data also found that depression predicted development of suicidal ideation.[21] Depression alone did not predict transition to suicidal plans or attempts among those with ideation. Similar to international research findings, persons with disorders characterized by marked anxiety or agitation or poor impulse control were more likely to move from merely thinking about suicide to making a plan or an attempt.[21] Although larger population research does not translate into individual clinical presentations, it provides support for clinical practice concerns associated with severe anxiety and agitation.

Clinically, asking patients if they feel like "jumping out of their skin" or that they "are going to explode" or have a feeling that they must "take action" or "do something" because they feel so restless inside is very helpful in eliciting reports of internal distress. Some patients denying these subjective symptoms may objectively demonstrate the increased motor movements or restlessness indicative of severe agitation or appear ruminative and overwhelmed. Patients with such symptoms and signs should be considered emergent cases and treated aggressively using benzodiazepines and/or antipsychotics. Oral forms of medication should be tried first.[62] Age and previous or ongoing exposure to medication should be considered, and the adequacy of treatment should be frequently reassessed.[62-64] Clinicians should vigilantly monitor for adverse effects, including possible worsening of agitation with medication-induced akathisia and possible Q-T interval prolongation.[62-64] Evaluation for psychiatric admission should be strongly considered.

SUICIDE RISK ASSESSMENT

As a National Patient Safety Goal in both general and psychiatric hospitals, the Joint Commission mandates suicide risk assessments for patients who are identified as being at risk.[65] This mandate stems from inpatient suicides being a frequent sentinel event over time.

Performance of a suicide risk assessment is a long-standing psychiatric practice recommendation. It is typically documented in the assessment/plan of a clinical note; identifies and discusses risk factors or warning signs that increase the likelihood of suicide; describes possible protective factors that may decrease suicidal behavior; states the level of suicide risk as low, medium, or high; and defines the care setting required to maintain safety (eg, outpatient, referral to the emergency department, hospitalization). Although this assessment is primarily a documentation requirement, with almost no research data to support its validation of risk levels or its effect on future suicide, it allows for a structured process to organize clinical impressions and decision making and to suggest clinical interventions.

The Suicide Assessment Five-step Evaluation and Triage (SAFE-T)[66] provides a framework for performing a suicide risk assessment and is publicly available. Clinical decision making begins by identifying the presence of warning signs and risk factors increasing the likelihood of suicide-related behaviors (Table 1).[34,36] These include psychiatric diagnoses and particular symptoms known to increase immediate suicide risk, including agitation or anxiety, command hallucinations, and sleep problems.

Protective factors may include the ability to manage stress appropriately, religious beliefs that increase the stigma of suicide, and the capacity to tolerate frustration. External factors that may mitigate risk include a sense of responsibility to family or friends, a healthy network of social supports, and positive therapeutic relationships. However, in the setting of acute risk and multiple risk factors in unfamiliar patients, the ability of protective factors to decrease risk should not be overestimated. In a crisis, protective factors may be easily overwhelmed, particularly in an impulsive, intoxicated, or otherwise disinhibited patient.

In questioning the patient perceived to be at risk, clinicians should ask specifically about suicide with a focus on suicidal thoughts, plans for suicide, and intent. The level of risk and care required should then be defined using the general recommendations in the following paragraph. As a caveat, when questions about level of risk or management remain, consultation with an experienced colleague or psychiatric clinician is valuable.

According to the SAFE-T model, low-risk patients—with or without suicidal ideation—have no specific plans or intent to commit suicide and have no history of active suicidal behavior. These patients should have recommended outpatient follow-up. Those at moderate risk include those with suicidal ideation plus a plan but with no intent or behavior. The decision whether to urgently refer a patient to a psychiatrist or emergency department depends on that patient's presentation. Patients who are referred may be hospitalized if further evaluation reveals that their level of illness or other clinical findings warrant it. High-risk patients include those with serious thoughts of suicide, those with a plan and/or intent to commit suicide, and those with prominent agitation, impulsivity, psychosis, or a recent suicide attempt. In such cases, clinicians should ensure constant observation and monitoring before arranging for immediate transfer for psychiatric evaluation or hospitalization. As the final steps in the process of suicide risk assessment, clinicians should document the data supporting the assigned level of risk, the level of care required, and treatment plans to reduce suicide risk.

PRACTICAL MANAGEMENT

In any given person, suicide risk is not fixed but fluctuating, with periods of increased risk in response to precipitating stressors. Sudden interpersonal losses or rejections—the death of a family member or a breakup of a relationship with a significant other—may trigger a suicidal crisis. Hospitalization can provide a safe environment to stabilize patients while allowing the crisis to pass and precipitating stressors to be resolved. Helpful treatment modalities for inpatient units include medication initiation, individual and group psychotherapy, rest, and social services interventions.

Particularly for patients being released from their office or during discharge from the hospital or emergency department, clinicians should recommend that family or friends secure or remove firearms, large quantities of medication, or other obvious means of self-harm and involve family and significant others in crisis planning and treatment.

The Joint Commission National Patient Safety Goal[65] mandates providing patients a 24-hour emergency number. The National Suicide Prevention Lifeline number at 1-800-273-TALK (8255) is an important resource and available 24 hours a day regardless of practice location. Clinicians should ensure that patients know how to use their on-call phone numbers in the event of a suicidal crisis and inform them of the availability of local emergency services. If patients call outpatient offices in suicidal crises, clinicians or office staff should call 911 or law enforcement as needed to ensure that patients are safe and that they are being transported safely to receive more intensive treatment.

Environmental factors may be even more relevant in management than usual. For patients in the emergency department, general hospital, or outpatient offices, the potential of medical equipment (eg, intravenous tubing) or the patients' own belongings being used in a suicide attempt should be carefully evaluated. Great efforts may be made to ensure a patient is referred for evaluation to an emergency department, while immediate safety needs may be missed (eg, patients may overdose on medications they have in their possession or on their person). If evaluation in the emergency department or hospitalization is thought to be necessary, patients should be transferred by ambulance. Although family or friends may offer (and desire) to provide transport, patients should be transferred safely using trained personnel following standard protocols. Clinicians should consider the possibility that some patients being evaluated for suicide risk may have overdosed or harmed themselves immediately before seeking care. Clinical situations should be reassessed as needed and the level of physiologic monitoring increased on the basis of changing presentations. Patients should be monitored closely both before and during their transitions between care settings during emergency evaluations. Although uncommon, suicides can occur in the emergency department, general hospital, and outpatient offices.

CONCLUSION

Patients with suicidal thoughts and behavior are often seen in primary care practices. Treatment can be effective, and collaborative models of care may have particular benefit in improving depression outcomes and, potentially, reducing suicidal outcomes. Although no way exists to predict those who will go on to die by suicide, treating clear warning signs for suicide can reduce patients' suffering. Asking about suicidal thoughts, plans, and past behavior is essential, while being sensitive to agitated states and aggressively treating them may resolve a psychiatric emergency.

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CME Questions About Practical Suicide-Risk Management

1. Which *one* of the following *most accurately* represents how many more times likely primary care physicians are to see patients in the month before their death by suicide than mental health clinicians?
   a. No more likely
   b. 1.5 times more likely
   c. More than 2 times more likely
   d. 3 times more likely
   e. Less likely

2. Which *one* of the following percentages *most accurately* reflects the percentage of US antidepressant prescriptions written by generalists?
   a. 45%
   b. 52%
   c. 57%
   d. 62%
   e. 71%

3. Which *one* of the following percentages *most accurately* reflects the percentage of those dying by suicide who have psychiatric illness?
   a. 75%
   b. 80%
   c. 85%
   d. 90%
   e. 95%

4. Which *one* of the following statements is *accurate* regarding symptoms reported or observed (suicidal ideation and anxiety) by inpatients in their last contacts before dying by suicide?
   a. 80% endorsed suicidal ideation; 40% were anxious or agitated
   b. 50% endorsed suicidal ideation; 40% were anxious or agitated
   c. 20% endorsed suicidal ideation; 80% were anxious or agitated
   d. 80% endorsed suicidal ideation; 80% were anxious or agitated
   e. 60% endorsed suicidal ideation; 40% were anxious or agitated

5. In a 2007 study assessing care in simulated patients asking for antidepressant treatment in primary care practices, which *one* of the following *best* reflects the percentage who were asked about suicide?
   a. 27%
   b. 36%
   c. 56%
   d. 68%
   e. 83%

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